



Premium Gas Compressor Oil

Phillips 66® Premium Gas Compressor Oil is a premium quality, part-synthetic lubricant developed for oil-flooded rotary screw and rotary vane compressors in natural gas and CO₂ service. It is also recommended for use as a cylinder and crankcase lubricant for reciprocating compressors in natural gas and CO₂ service. Premium Gas Compressor Oil is specially formulated to minimize the effects of gas dilution and oil absorption in these applications.

Premium Gas Compressor Oil is formulated to provide excellent service and protection over a wide temperature range. It has excellent oxidation resistance and thermal stability at high temperatures to minimize deposit formation, while a high viscosity index and good low-temperature properties allow for year-round use. It protects against rust and corrosion, and is specifically formulated to resist corrosion caused by hydrogen sulfide in sour gas. The synthetic blend formulation provides enhanced oxidation resistance and lower volatility at high temperatures compared to conventional mineral oils which can result in extended service intervals, lower oil consumption and reduced maintenance.

Applications

- Oil-flooded rotary screw and rotary vane gas compressors
- Industrial reciprocating compressors pumping natural gas or CO₂
- Reciprocating compressors commonly found in remote gas gathering stations

Features/Benefits

- Excellent oxidation resistance and thermal stability at high temperatures
- High viscosity index and low pour point for use over a wide temperature range
- Formulated to minimize the effects of gas dilution and oil absorption
- Low varnish-forming tendency
- Resists hydrogen sulfide corrosion
- Protects against rust and corrosion

Premium

Synthetic Blend

**Compressor Oil
for Natural Gas
and CO₂ Service**

KEEPING THE
WORLD
RUNNING
SMOOTHLY. 



Premium Gas Compressor Oil

Typical Properties			
ISO Grade		150	320
Specific Gravity @ 60°F		0.888	0.896
Density, lbs/gal @ 60°F		7.39	7.46
Color	ASTM D1500	0.5	1.0
Flash Point (COC), °C (°F)	ASTM D92	244 (471)	244 (471)
Pour Point, °C (°F)	ASTM D97	-40 (-40)	-40 (-40)
Viscosity	ASTM D445		
cSt @ 40°C		150	310
cSt @ 100°C		18.6	35.7
Viscosity Index	ASTM D2270	140	162
Acid Number, mg KOH/g	ASTM D974	0.17	0.17
Copper Corrosion	ASTM D130	1a	1a
Demulsibility, minutes to pass	ASTM D1401	15	25
Foam Test, Seq. I, mL	ASTM D892	0/0	0/0
Four-Ball Wear, Scar Diameter, mm	ASTM D4172	0.50	0.50
Oxidation Stability, RPVOT, minutes	ASTM D2272	1,100	1,100
Rust Test	ASTM D665 A&B	Pass	Pass

Health & Safety Information

For recommendations on safe handling and use of this product, please refer to the Safety Data Sheet via <http://www.phillips66.com/SDS>.